

Work Order ID 92946-1

November-12-12 1:35:03 PM

SPLIT-1

\*92946\*

Page 1

Item ID: D4634-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Fwd. Center Ceiling Panel

Stop \*NS2\*

Start Date: 12/11/2012 Start Qty: 2.00

\*2\*

Required Date: 12/12/2012 Req'd Qty: 2.00

\*2\*

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: MJS

Date: 12-11-12 Tooling:

Date:

Run Start \*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

Draw Nbr

Revision Nbr

D4634

AB Dh 13/02/22

100

0.00

\*100\*

HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks

x2  
x1 Dh 12/12/04 12/12/04

105

0.00

\*105\*

Dry Material

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 KYDEX

Temp: 150° F

Time IN: 7:00 pm

Time OUT: 7:00 am

12/12/03  
12/12/04

x3

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|------------------------------------|--|--------------------------------------|---|--------------------------|---|------------------------|---------------------|---------------------|--|--|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                    |  |                                      | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                          | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |                        |                     |                     |  |  | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/>            |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| <b>Root Cause</b>  | <b>Date</b>                        | <b>Step</b>                                  | <b>Qty</b>                           | <b>Description of work order update or Non-conformance</b>  | <b>Initial Chief Eng</b> | <b>Action Description</b>   | <b>Sign &amp; Date</b> | <b>Verification</b> | <b>QC Inspector</b> |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Doc/Data <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Equip/Tooling <input type="checkbox"/>                       |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Operator <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Material <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Setup <input type="checkbox"/>                               |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Other <input type="checkbox"/>                               |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Process <input type="checkbox"/>                             |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Supplier <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Training <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Unapproved <input type="checkbox"/>                          |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| FAULT CATEGORY  |   |  |   |   |  |  |  |  |  |
|---|---|--|---|---|--|--|--|--|--|
| <b>Landing Gear</b>                                   |   |  | <b>General</b>                                |   |  |  |  |  |  |
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           | <input type="checkbox"/> Ovalized             | <input type="checkbox"/> Pressure/Forced    |  |  |  |  |  |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        | <input type="checkbox"/> Over/Under tolerance | <input type="checkbox"/> Temperature/Cure   |  |  |  |  |  |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           | <input type="checkbox"/> Part Incorrect       | <input type="checkbox"/> Weld               |  |  |  |  |  |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear | <input type="checkbox"/> Part Lost/Missing    | <input type="checkbox"/> Wrong Stock Pulled |  |  |  |  |  |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     | <input type="checkbox"/> Part Moved           |   |  |  |  |  |  |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      | <input type="checkbox"/> Positioned Wrong     | <input type="checkbox"/> Other              |  |  |  |  |  |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         | <input type="checkbox"/> Power Loss/Surge     |   |  |  |  |  |  |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |   |   |  |  |  |  |  |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |   |   |  |  |  |  |  |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |   |   |  |  |  |  |  |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |   |   |  |  |  |  |  |



# Work Order ID 92946

November-12-12 1:35:03 PM

\*92946\*

Page 2

Item ID: D4634-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Fwd. Center Ceiling Panel

Start Date: 12/11/2012 Start Qty: 2.00 \*2\*

Cust Item ID:

Required Date: 12/12/2012 Req'd Qty: 2.00 \*2\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID Tool # Plan  
Code Accept Reject Reject Insp.  
Qty Qty Number Stamp

110

0.00

\*110\*

THERMOFORMING MACHINE

Thermoform

Memo

0.00

Thermoforming Machine

Thermoform as per Dwg. D4634-1 and Folio FTA144

Dwg. Rev. A

Folio Rev. A

Visually inspect for proper formation and texture

130

0.00

\*130\*

HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Trim to Finished Dimensions

140

QC2- Inspect parts off machine FAI/FAIB

0.00

\*140\*

QC

Memo

0.00

Quality Control

D4634  
207  
208

PTO →

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: AmDate: 13/03/11QA Closed: CKDate: 13/7/14

|   |                 |            |   |  |   |  |                              |                                  |  |  |   |
|---|-----------------|------------|---|--|---|--|------------------------------|----------------------------------|--|--|---|
| Work Order: <u>92946</u><br>Part No. <u>D 4634-1</u><br>NCR No. <u>13-23666</u>   |                 |            |   | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input checked="" type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |   | <b>AGAINST DEPARTMENT/PROCESS</b><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input checked="" type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                              |                                  |  |  |   |
| Root Cause  | Date            | Step       | Qty   | Description of work order update or Non-conformance  | Initial Chief Eng                                 | Action Description   | Sign & Date                  | Verification                     | QC Inspector   |  |   |
| Doc/Data <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Operator <input checked="" type="checkbox"/><br>Material <input type="checkbox"/><br>Setup <input type="checkbox"/><br>Other <input type="checkbox"/><br>Process <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Training <input type="checkbox"/><br>Unapproved <input type="checkbox"/>   | <u>12/04/04</u> | <u>110</u> | <u>1</u>  | <u>First pull mould did not penetrate deep enough.</u><br><u>R.L. operator error</u>   | <u>DAS 16</u><br><u>Q57012</u><br><u>13/07/07</u> | <u>Change platten setting +</u><br><u>Remake 1 part.</u><br><u>Scrap 1 part</u><br><u># 544.49</u>   | <u>Wh</u><br><u>12/04/05</u> | <u>DAS 16</u><br><u>13/02/27</u> | <u>DAS 16</u><br><u>Q57012</u><br><u>13/02/27</u>  |  |   |
| <b>FAULT CATEGORY</b>   |                 |            |   |  |   |  |                              |                                  |  |  |   |
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |                 |            | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |  |   | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabelled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions   |                              |                                  | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |



# Work Order ID 92946

November-12-12 1:35:03 PM

\*92946\*

Page 3

Item ID: D4634-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Fwd. Center Ceiling Panel

Stop \*NS2\*

Start Date: 12/11/2012 Start Qty: 2.00 \*2\*

Cust Item ID:

Required Date: 12/12/2012 Req'd Qty: 2.00 \*2\*

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling: Date:

Run Start \*NR1\*

QC: Date:

SPC (Y/N): Date:

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description                      | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 150                            | QC5- Inspect part completeness to step on W/O | 0.00                 |         |        |              |               |               |                  |                |
| *150*                          |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |
| 160                            |   | 0.00                 |         |        |              |               |               |                  |                |
| *160*                          | Packaging                                     |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      |   |                      |         |        |              |               |               |                  |                |
| 170                            | QC21- Final Inspection - Work Order Release   | 0.00                 |         |        |              |               |               |                  |                |
| *170*                          |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

04700FCH  
17191

MF  
12-2-25

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|------------------------------------|--|--------------------------------------|---|-------------------|---|-------------|--------------|--------------|--|--|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                    |  |                                      | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                   | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Skid-tube <input type="checkbox"/></td> <td style="width: 33%;">Crosstube <input type="checkbox"/></td> <td style="width: 33%;">Water Jet <input type="checkbox"/></td> <td style="width: 33%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |             |              |              |  |  | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/>            |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| <b>Root Cause</b>  | Date                               | Step   | Qty                                  | Description of work order update or Non-conformance   | Initial Chief Eng | Action Description  | Sign & Date | Verification | QC Inspector |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Doc/Data <input type="checkbox"/>                            |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Equip/Tooling <input type="checkbox"/>                       |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Operator <input type="checkbox"/>                            |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Material <input type="checkbox"/>                            |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Setup <input type="checkbox"/>                               |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Other <input type="checkbox"/>                               |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Process <input type="checkbox"/>                             |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Supplier <input type="checkbox"/>                            |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Training <input type="checkbox"/>                            |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Unapproved <input type="checkbox"/>                          |                                    |  |                                      |   |                   |   |             |              |              |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| FAULT CATEGORY  |   |  |  |   |
|---|---|--|--|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspector Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside D mensions | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |



# Picklist Print

November-12-12 1:35:06 PM

Page 1

Work Order ID: 92946

\*92946\*

Parent Item: D4634-1

\*D4634-1\*

Parent Item Name: Fwd. Center Ceiling Panel

Start Date: 12/11/2012

Required Date: 12/12/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev.A New Issue 12/05/07 DL

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| MKYD6185S.080-P3-62015          |                        | Purchased     | No          |                     |                  | 100             | sf                 | 1,028.362      | 12.93       | 28.73333     |               |                |        |

\*MKYD6185S 080-P3-62015\*

\*\*

6185 KYDEX .080"

Location

Loc Qty

Loc Code

therm

1028.362377

116576

14.148377

121755

1014.214

43.1 sq ft.

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

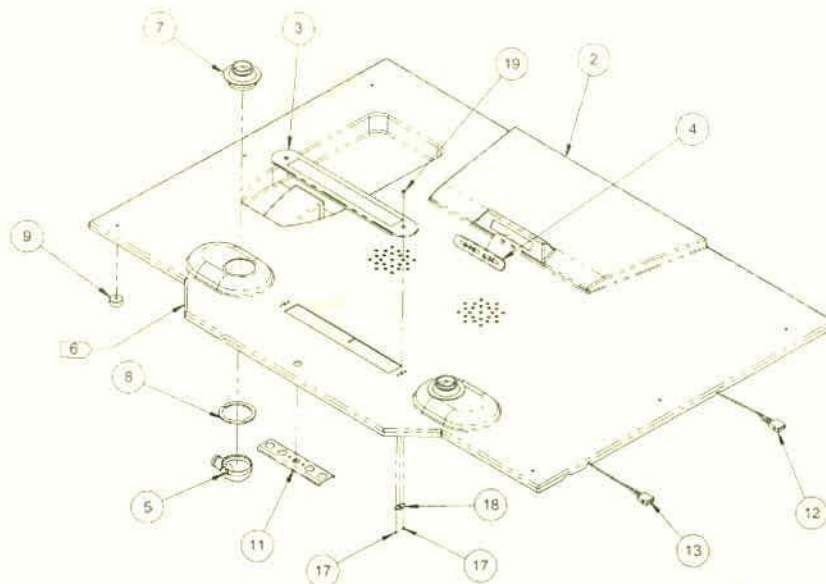
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
|--|------------------------------------|--|--------------------------------------|---|--------------------------|---|------------------------|---------------------|---------------------|--|--|------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|---|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |                                    |  |                                      | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> |                          | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width:100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermofforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> |                        |                     |                     |  |  | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermofforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/>           | Engineering <input type="checkbox"/> |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>   | Quality <input type="checkbox"/>     |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Thermofforming <input type="checkbox"/>                      | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/>       |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/>            |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| <b>Root Cause</b>  | <b>Date</b>                        | <b>Step</b>                                  | <b>Qty</b>                           | <b>Description of work order update or Non-conformance</b>  | <b>Initial Chief Eng</b> | <b>Action Description</b>   | <b>Sign &amp; Date</b> | <b>Verification</b> | <b>QC Inspector</b> |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Doc/Data <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Equip/Tooling <input type="checkbox"/>                       |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Operator <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Material <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Setup <input type="checkbox"/>                               |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Other <input type="checkbox"/>                               |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Process <input type="checkbox"/>                             |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Supplier <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Training <input type="checkbox"/>                            |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |
| Unapproved <input type="checkbox"/>                          |                                    |  |                                      |   |                          |   |                        |                     |                     |  |  |                                    |                                    |                                    |                                      |                                    |                                    |  |                                  |   |                                    |  |                                |                                    |                                    |                                   |  |

| FAULT CATEGORY  |  |  |   |  |  |   |  |  |  |  |   |  |
|---|--|--|---|--|--|---|--|--|--|--|---|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |  |  | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio |  |  | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions |  |  | <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge |  | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |  |





**D4634-041 FWD, CENTER CEILING PANEL ASSY**

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4, ON SMOOTH SIDE
- 7) WEIGHT: 7.5 lbs
- 8) APPLY A LAYER OF DEVCON PLASTIC WELDER II (0.02 TO 0.04 THICK) TO BOND D4694-041, D4712-041, D4647-3, MPNY-750S-9C & D4664-041, WAIT FOR 24 HOURS TO CURE
- 9) LOCATE LABELS AS SHOWN, SEAL LABELS USING 3950 EDGE SEALER OVER LABEL TOP SURFACE
- 10) LOCATE D4647-3 ANGLE USING GROOVE TO ALIGN WITH D4634-1 FWD CENTER PANEL
- 11) TRANSFER  $\varnothing 0.204$  (#6 DRILL) FROM D4634-1 TO D4694-041 PRIOR TO INSTALLING D4728-047/-051
- 12) INSTALL D4728-047/-051 WIRE HARNESS PER QSI 048

| ITEM NO. | QTY.<br>-041 | PART NUMBER   | DESCRIPTION                           |
|----------|--------------|---------------|---------------------------------------|
| 1        | X            | D4634-041     | FWD, CENTER CEILING PANEL ASSY        |
| 2        | 1            | D4634-1       | FWD, CENTER CEILING PANEL             |
| 3        | 1            | D4638-1       | LED LIGHT                             |
| 4        | 1            | D4645-1       | NO SMOKING & FASTEN BELT LIGHT        |
| 5        | 2            | D4646-1       | PLENUM CAP ASSEMBLY                   |
| 6        | 2            | D4647-3       | ANGLE                                 |
| 7        | 2            | D4652-1       | AIR VALVE                             |
| 8        | 2            |               | AIR VALVE NUT                         |
| 9        | 6            | D4664-5       | SPACER                                |
| 10       | 1            | D4694-041     | FWD CHANNEL ASSEMBLY                  |
| 11       | 1            | D4712-041     | BRACKET ASSEMBLY                      |
| 12       | 1            | D4728-047     | ADVISORY LIGHT (FWD) HARNESS ASSEMBLY |
| 13       | 1            | D4728-051     | CABIN LIGHT #1 HARNESS ASSEMBLY       |
| 14       | 1            | D4732-15      | LABEL                                 |
| 15       | 1            | D4732-19      | LABEL                                 |
| 16       | 8            | MPNY-750S-9-C | MOUNTING PAD                          |
| 17       | 4            | MS20426AD3-3  | RIVET                                 |
| 18       | 2            | MS21059L3     | ANCHOR NUT                            |
| 19       | 2            | MS24694-S5    | SCREW                                 |
| 20       | 8            | PLT1.5M-M     | TIE-WRAP (OR PLT1.5M-C)               |

STUDY  
REVIEW  
ENGINEER  
UNCLASSIFIED  
SUBJECT  
DATE  
NO. 92946 MLJ  
12-11-12

RELEASED  
2012-11-05

|            |             |    |          |
|------------|-------------|----|----------|
| A          | NEW ISSUE   | RF | 12.07.25 |
| REV        | DESCRIPTION | BY | DATE     |
| DESIGN     | RF          |    |          |
| DRAWN      | RF          |    |          |
| CHECKED    | RF          |    |          |
| MFG. APPR. | RF          |    |          |
| APPROVED   | RF          |    |          |
| DE APPR.   | RF          |    |          |
| DATE       | 12.07.25    |    |          |

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HAWKESBURY, ONTARIO, CANADA

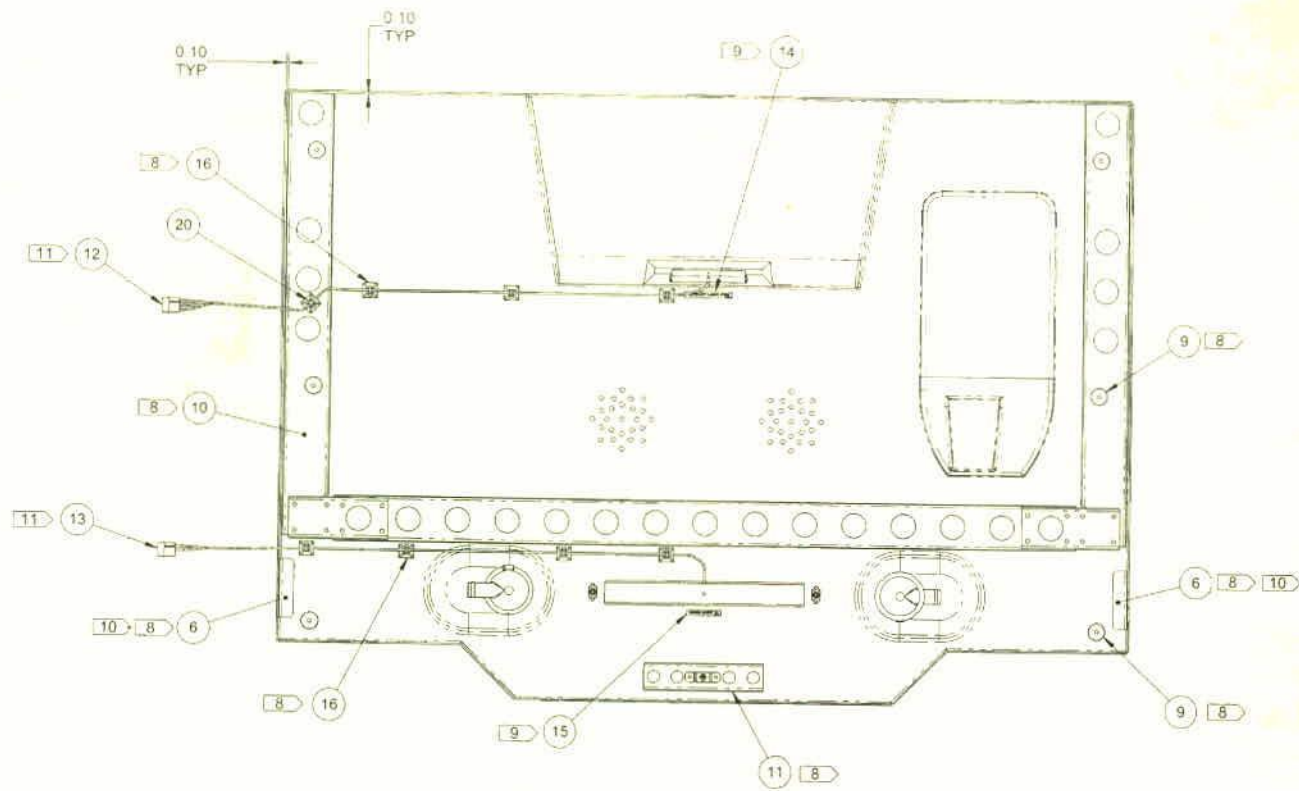
DRAWING NO. **D4634** REV. A  
SHEET 1 OF 14  
TITLE **CENTER CEILING PANELS** SCALE NTS

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92946



**D4634-041 FWD. CENTER CEILING PANEL ASSY**  
AUXILIARY VIEW

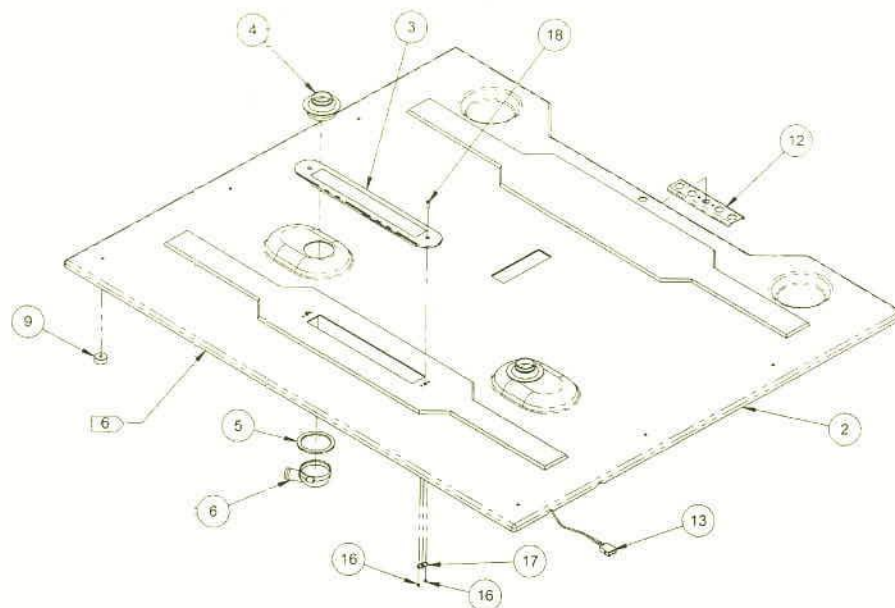
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| DRAWN      | RF                 |  |               |
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| MFG. APPR. | <i>[Signature]</i> | TITLE  | SHEET 2 OF 14 |
| APPROVED   | <i>[Signature]</i> | <b>CENTER CEILING PANELS</b>   | SCALE         |
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92946



| ITEM NO. | QTY | PART NUMBER   | DESCRIPTION                       |
|----------|-----|---------------|-----------------------------------|
| 1        | X   | D4634-043     | MIDDLE, CENTER CEILING PANEL ASSY |
| 2        | 1   | D4634-3       | MIDDLE, CENTER CEILING PANEL      |
| 3        | 1   | D4638-1       | LED LIGHT                         |
| 4        | 2   | D4652-1       | AIR VALVE                         |
| 5        | 2   | -             | AIR VALVE NUT                     |
| 6        | 2   | D4646-1       | PLENUM CAP ASSEMBLY               |
| 7        | 1   | D4647-1       | DOUBLER                           |
| 8        | 2   | D4647-3       | ANGLE                             |
| 9        | 6   | D4664-5       | SPACER                            |
| 10       | 1   | D4694-7       | MIDDLE CHANNEL                    |
| 11       | 1   | D4694-043     | MIDDLE CHANNEL ASSEMBLY           |
| 12       | 1   | D4712-041     | BRACKET ASSEMBLY                  |
| 13       | 1   | D4728-053     | CABIN LIGHT #2 HARNESS ASSEMBLY   |
| 14       | 1   | D4732-21      | LABEL                             |
| 15       | 1   | D4732-25      | LABEL                             |
| 16       | 4   | MS20426AD3-3  | RIVET                             |
| 17       | 2   | MS21059L3     | ANCHOR NUT                        |
| 18       | 2   | MS24694-S5    | SCREW                             |
| 19       | 3   | MPNY-750S-9-C | MOUNTING PAD                      |
| 20       | 3   | PLT1.5M-M     | TIE-WRAP (OR PLT1.5M-C)           |

### D4634-043 MIDDLE, CENTER CEILING PANEL ASSY

#### NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4, ON SMOOTH SIDE
- 7) WEIGHT: 9.5 lbs
- 8) APPLY A LAYER OF DEVCON PLASTIC WELDER II (0.02 TO 0.04 THICK) TO BOND D4694-043, D4712-041, D4647-1/-3, MPNY-750S-9C & D4664-041, WAIT FOR 24 HOURS TO CURE
- 9) LOCATE LABELS AS SHOWN, SEAL LABELS USING 3950 EDGE SEALER OVER LABEL TOP SURFACE
- 10) LOCATE D4647-3 ANGLE USING GROOVE TO ALIGN WITH D4634-3 MIDDLE CENTER PANEL
- 11) TRANSFER  $\varnothing 0.204$  (#6 DRILL) FROM D4634-3 TO D4694-7/-043 PRIOR TO INSTALLING D4728-053
- 12) INSTALL D4728-053 WIRE HARNESS PER QSI 048

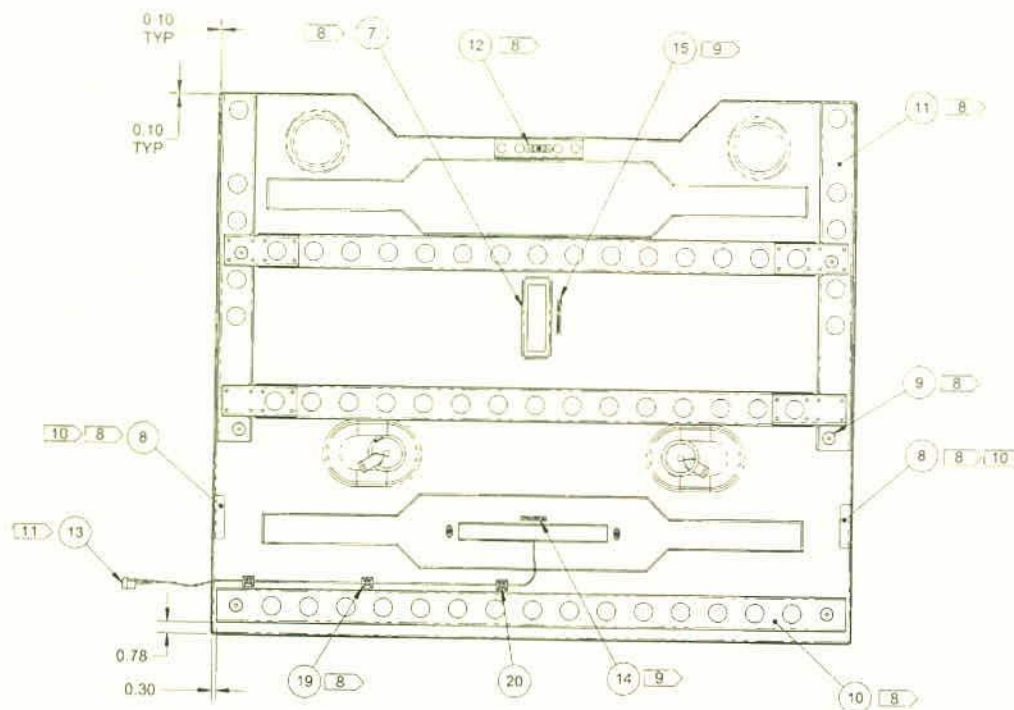
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| MFG. APPR. | RF       | D4634  | SHEET 3 OF 14 |
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92946



**D4634-043 MIDDLE, CENTER CEILING PANEL ASSY**  
AUXILIARY VIEW

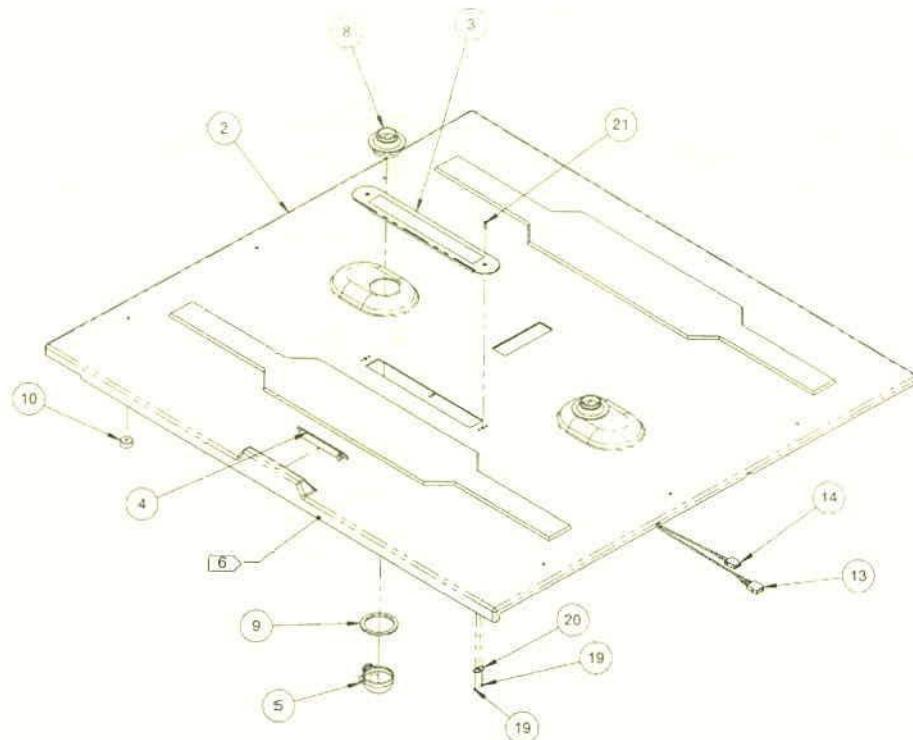
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| MFG. APPR. | RF       | D4634   | SHEET 4 OF 14 |
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92946



| ITEM NO | QTY -045 | PART NUMBER   | DESCRIPTION                           |
|---------|----------|---------------|---------------------------------------|
| 1       | X        | D4634-045     | AFT, CENTER CEILING PANEL ASSY        |
| 2       | 1        | D4634-5       | AFT, CENTER CEILING PANEL             |
| 3       | 1        | D4638-1       | LED LIGHT                             |
| 4       | 1        | D4645-1       | NO SMOKING & FASTEN BELT LIGHT        |
| 5       | 2        | D4646-1       | PLENUM CAP ASSEMBLY                   |
| 6       | 1        | D4647-1       | DOUBLER                               |
| 7       | 2        | D4647-3       | ANGLE                                 |
| 8       | 2        | D4652-1       | AIR VALVE                             |
| 9       | 2        | -             | AIR VALVE NUT                         |
| 10      | 6        | D4664-5       | SPACER                                |
| 11      | 1        | D4694-045     | AFT CHANNEL ASSEMBLY                  |
| 12      | 1        | D4694-047     | AFT CHANNEL ASSEMBLY                  |
| 13      | 1        | D4728-049     | ADVISORY LIGHT (AFT) HARNESS ASSEMBLY |
| 14      | 1        | D4728-055     | CABIN LIGHT #3 ASSEMBLY               |
| 15      | 1        | D4732-17      | LABEL                                 |
| 16      | 1        | D4732-23      | LABEL                                 |
| 17      | 1        | D4732-27      | LABEL                                 |
| 18      | 7        | MPNY-750S-9-C | MOUNTING PAD                          |
| 19      | 4        | MS20426AD3-3  | RIVET                                 |
| 20      | 2        | MS21059L3     | ANCHOR NUT                            |
| 21      | 2        | MS24694-S5    | SCREW                                 |
| 22      | 7        | PLT1.5M-M     | TIE-WRAP (OR PLT1.5M-C)               |

# **D4634-045 AFT, CENTER CEILING PANEL ASSY**

## **NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6-4, ON SMOOTH SIDE
- 7) WEIGHT: 10.0 lbs
- 8) APPLY A LAYER OF DEVCON PLASTIC WELDER II (0.02 TO 0.04 THICK) TO BOND D4694-045/-047, D4647-1/-3, MPNY-750S-9C & D4664-041, WAIT FOR 24 HOURS TO CURE
- 9) LOCATE LABELS AS SHOWN, SEAL LABELS USING 3950 EDGE SEALER OVER LABEL TOP SURFACE
- 10) LOCATE D4647-3 ANGLE USING GROOVE TO ALIGN WITH D4634-5 AFT CENTER PANEL
- 11) TRANSFER  $\varnothing 0.204$  (#6 DRILL) FROM D4634-5 TO D4694-045/-047 PRIOR TO INSTALLING D4728-049/-055
- 12) INSTALL D4728-049/-055 WIRE HARNESS PER QSI 048

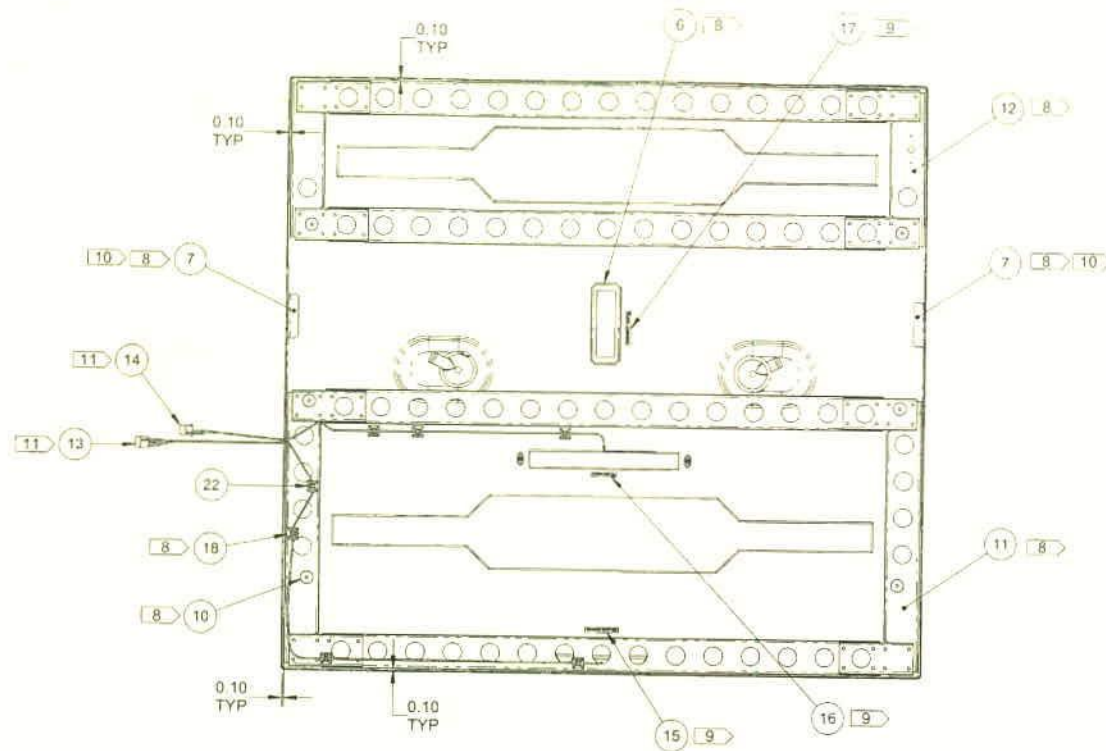
RELEASED  
2012-11-05  
MP

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| DRAWN      | RF       |  |               |
| CHECKED    | RF       | DRAWING NO.  | REV. A        |
| MFG. APPR. | RF       | D4634  | SHEET 5 OF 14 |
| APPROVED   | RF       | TITLE  | SCALE         |
| DE APPR.   | RF       | CENTER CEILING PANELS  | NTS           |
| DATE       | 12.07.25 | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. WHO IS SUPPLIED BY THE SUPPLIER. CHECK FOR THIS IN<br>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br>WRITTEN PERMISSION FROM DART AEROSPACE LTD. |               |





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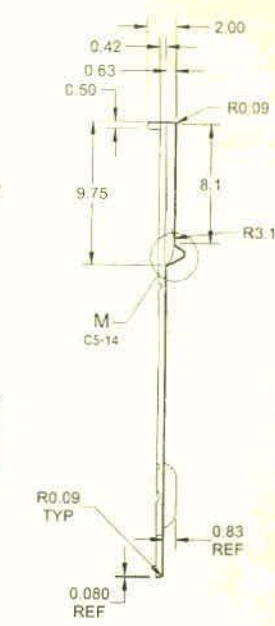
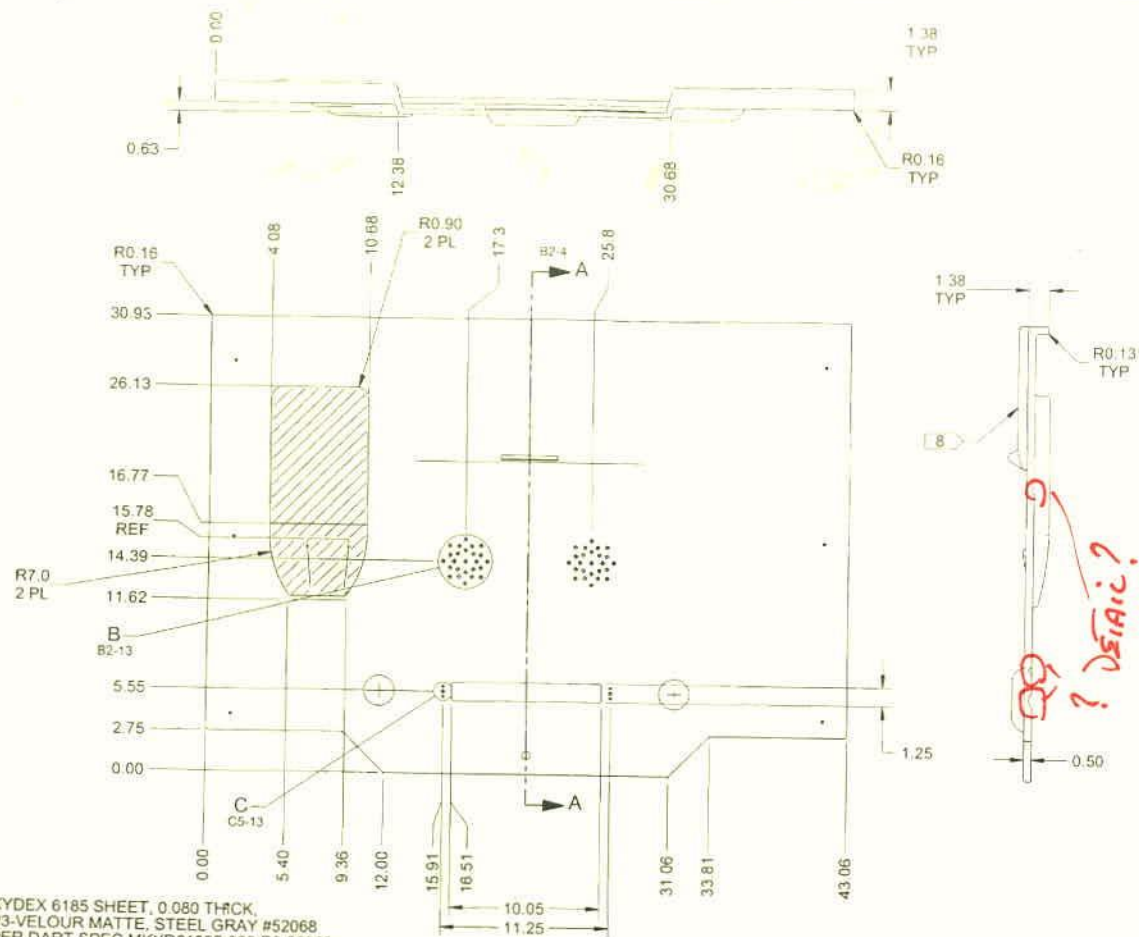
**D4634-045 AFT, CENTER CEILING PANEL ASSY**  
AUXILIARY VIEW

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| DRAWN      | RF                 |  |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.  | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | D4634  | SHEET 6 OF 14 |
| APPROVED   | <i>[Signature]</i> | TITLE  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | CENTER CEILING PANELS  | NTS           |
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SECTION A-A C6-4

- NOTES:
- 1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 PER DART SPEC MKYD6185S.080-P3-52068
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 5.59 lbs
  - 8) TEXTURE ON THIS SIDE
  - 9) 0.14 RADIUS NOT SHOWN FOR CLARITY
  - 10) DRILL & TRIM D4634-1 PER TOOL DT9836
  - 11) THERMOFORM PER QSI 022 USING DT9844 TOOL  
MIN. THICKNESS AFTER FORMING:  
SHADED AREA = 0.020  
EDGES = 0.060  
ELSEWHERE = 0.070

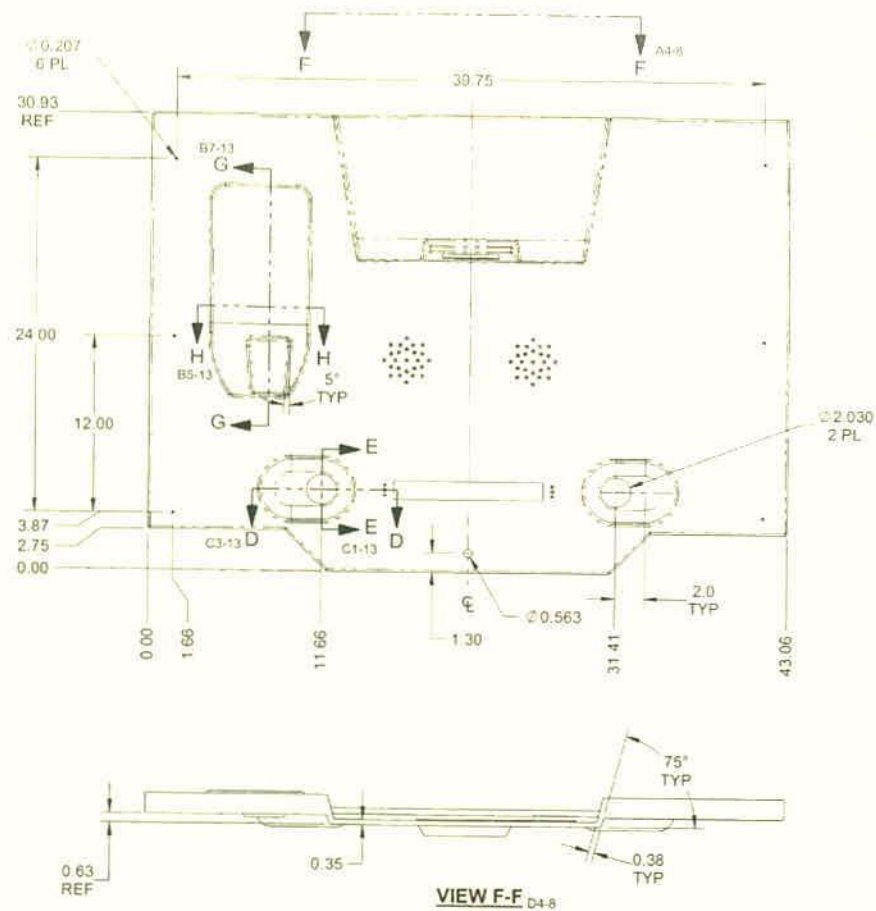
D4634-1 FWD, CENTER CEILING PANEL

|            |                    |  |               |
|------------|--------------------|--|---------------|
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| DRAWN      | RF                 |  |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.  | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | D4634  | SHEET 7 OF 14 |
| APPROVED   | <i>[Signature]</i> | TITLE  | SCALE         |
| DE APPR.   | <i>[Signature]</i> | CENTER CEILING PANELS  | NTS           |
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Q. 1  
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Q. 100

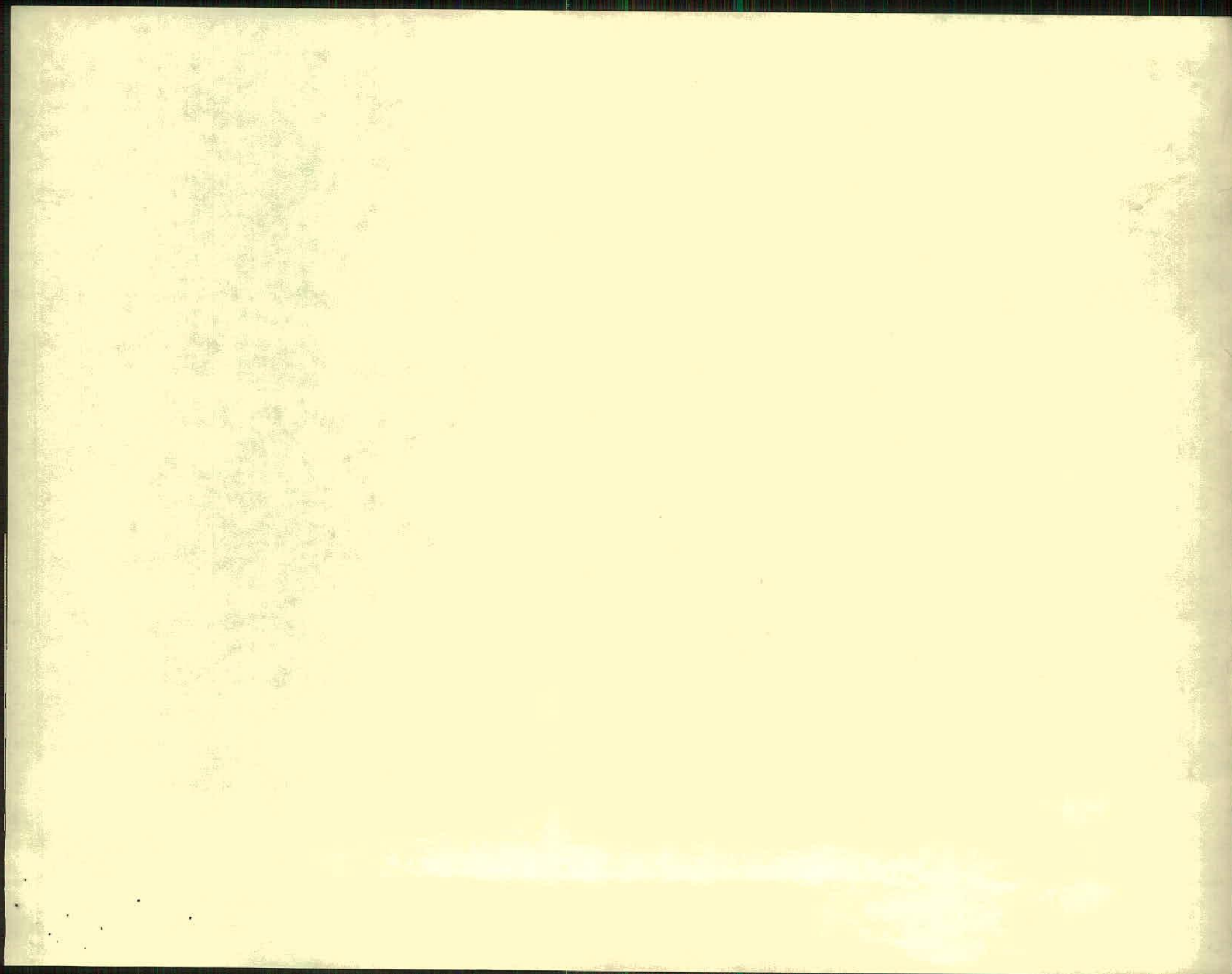


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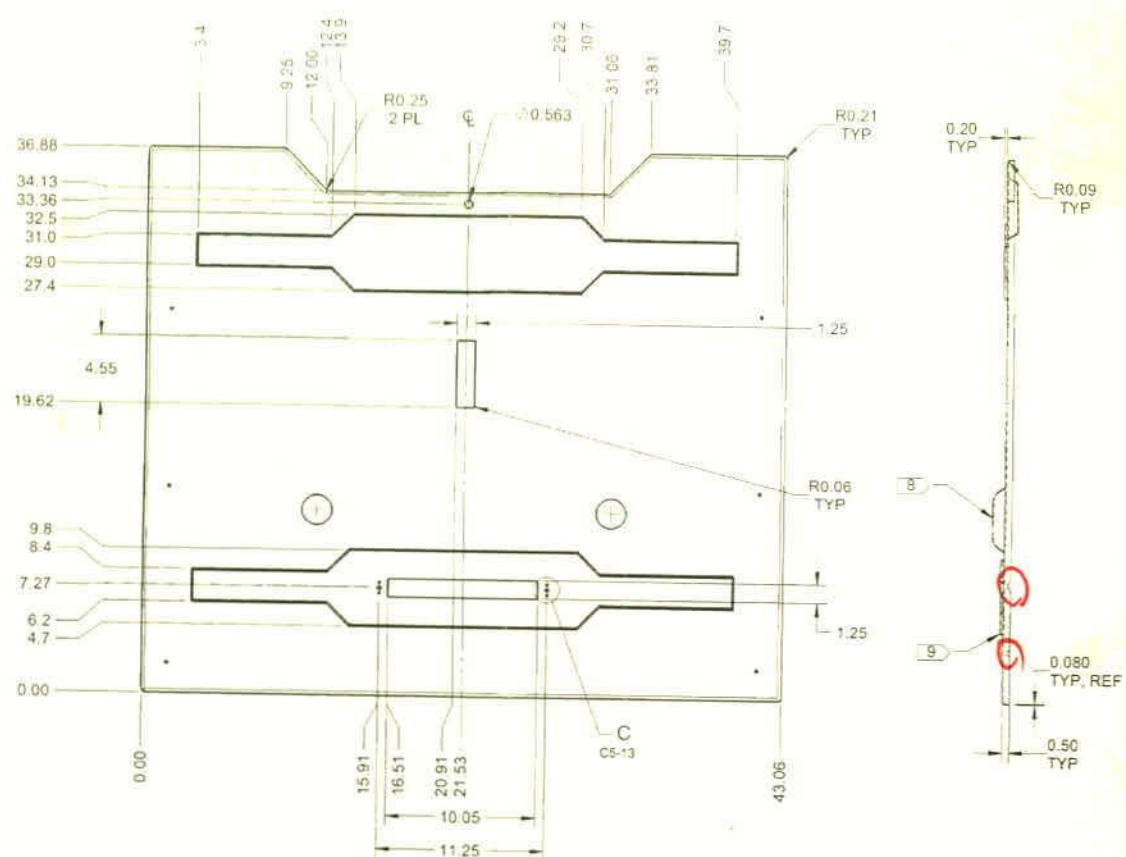
**D4634-1 FWD, CENTER CEILING PANEL**  
AUXILIARY VIEW

|            |                    |   |               |
|------------|--------------------|---|---------------|
| DESIGN     | RF                 | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |               |
| DRAWN      | RF                 |   |               |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.   | REV. A        |
| MFG. APPR. | <i>[Signature]</i> | <b>D4634</b>  | SHEET 8 OF 14 |
| APPROVED   | <i>[Signature]</i> | TITLE   | SCALE         |
| DE APPR.   | <i>[Signature]</i> | <b>CENTER CEILING PANELS</b>  | NTS           |
| DATE       | 12.07.25           | <small>COPYRIGHT © 2012 BY DART AEROSPACE LTD<br/>THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |               |





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RELEASE  
2012-11-05

NOTES:

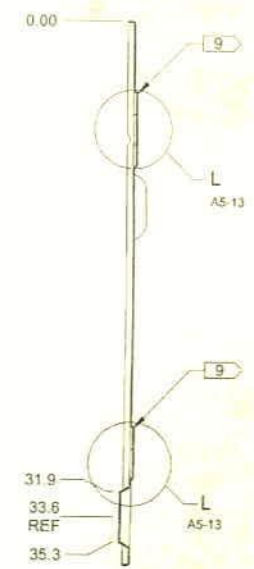
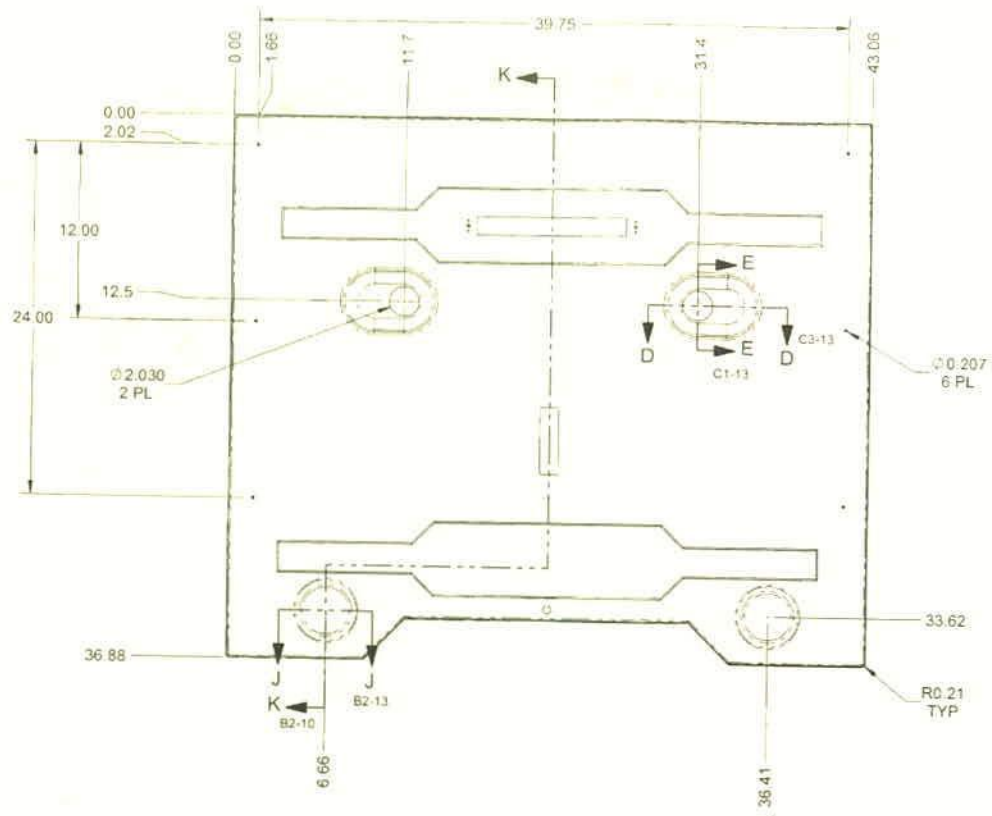
- 1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK,  
P3-VELOUR MATTE, STEEL GRAY #52068  
PER DART SPEC MKYD6185S.080-P3-52068
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 6.31 lbs
- 8) TEXTURE ON THIS SIDE
- 9) 0.14 RADIUS NOT SHOWN FOR CLARITY
- 10) DRILL & TRIM D4634-3 PER TOOL DT9837
- 11) THERMOFORM PER QSI 022 USING DT9845 TOOL  
MIN. 1 THICKNESS AFTER FORMING:  
EDGES = 0.060  
ELSEWHERE = 0.070

**D4634-3 MIDDLE, CENTER CEILING PANEL**

|            |          |   |               |
|------------|----------|---|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |               |
| DRAWN      | RF       |   |               |
| CHECKED    | RF       | DRAWING NO.   | REV. A        |
| MFG. APPR. | RF       | D4634   | SHEET 9 OF 14 |
| APPROVED   | RF       | TITLE   | SCALE         |
| DE APPR.   | RF       | CENTER CEILING PANELS   | NTS           |
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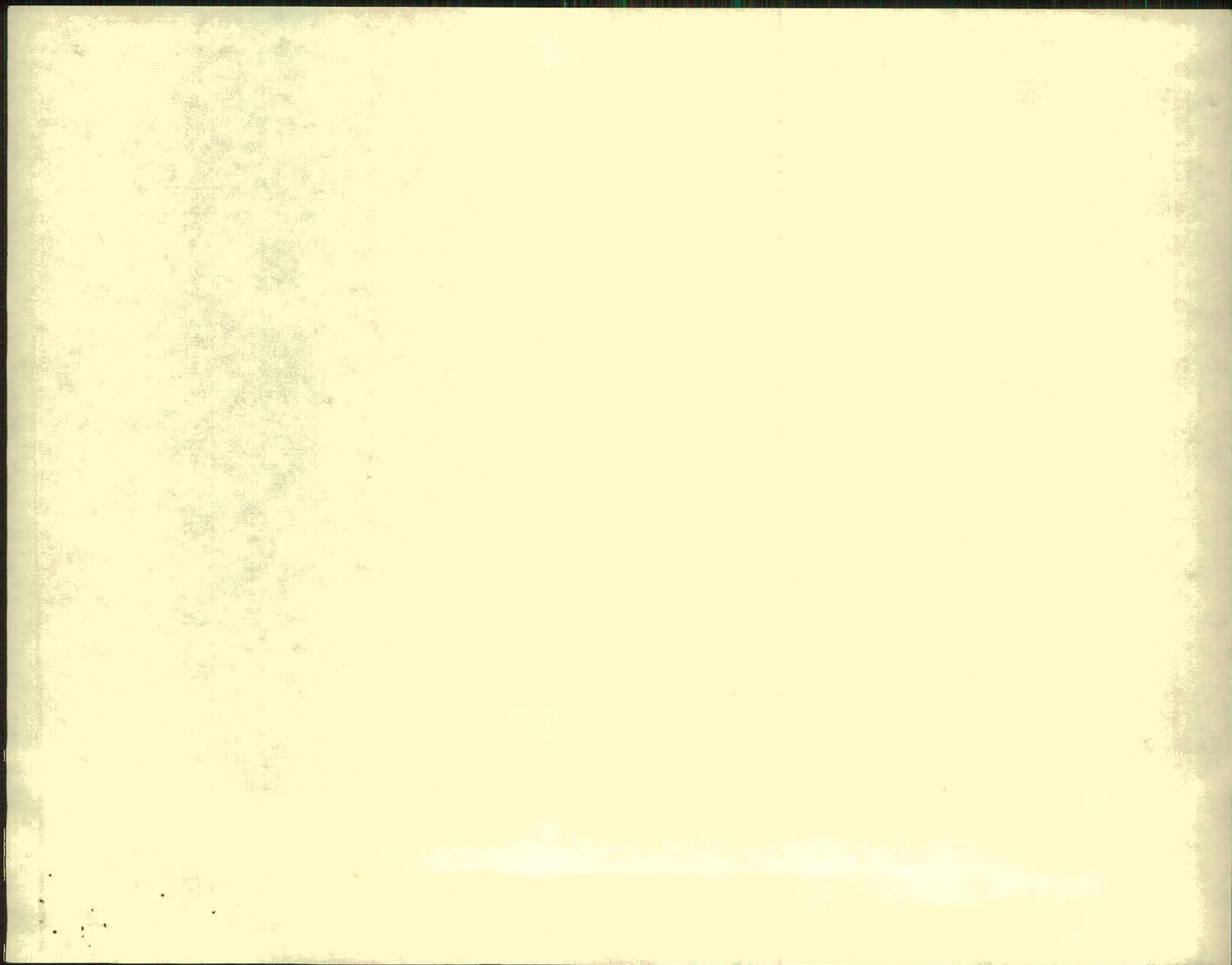
SECTION K-K B5-10

D4634-3 MIDDLE, CENTER CEILING PANEL  
AUXILIARY VIEW

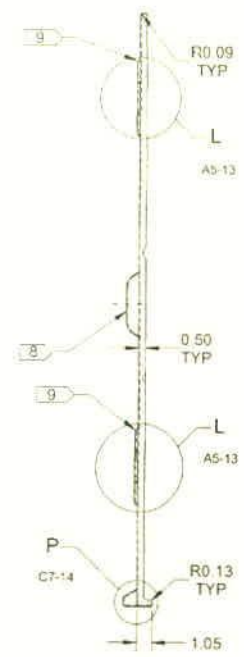
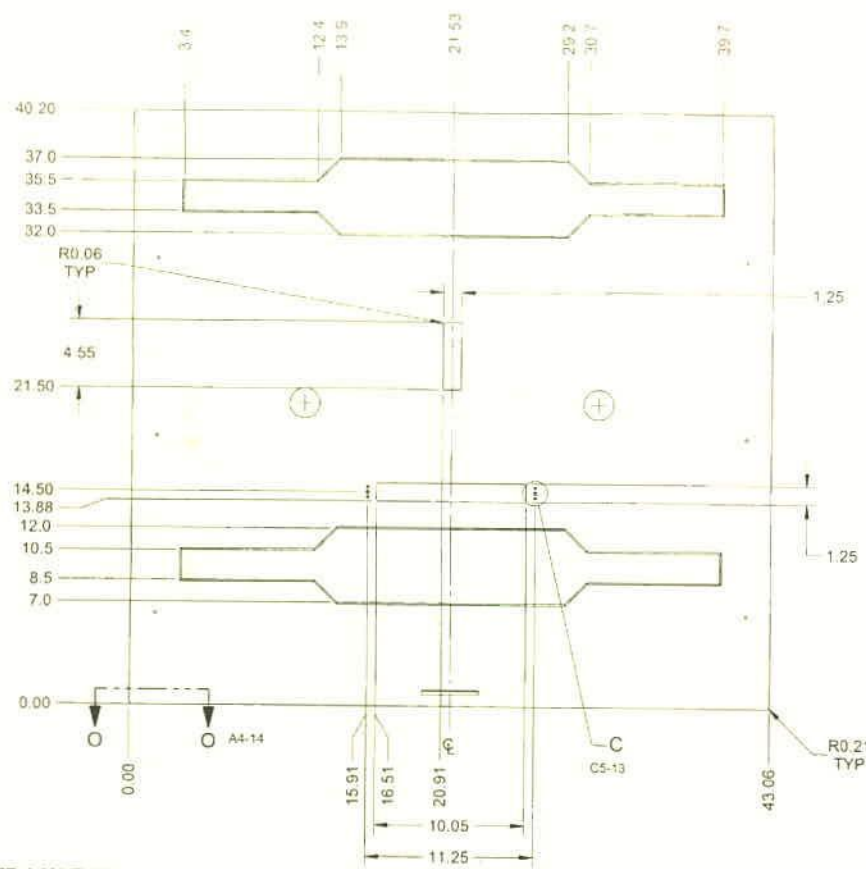
2012-11-05  
NAH

|            |          |  |                |
|------------|----------|--|----------------|
| DESIGN     | RF       | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA  |                |
| DRAWN      | RF       |  |                |
| CHECKED    | RF       | DRAWING NO.  | REV. A         |
| MFG. APPR. | RF       | D4634  | SHEET 10 OF 14 |
| APPROVED   | RF       | TITLE  | SCALE          |
| DE APPR.   | RF       | CENTER CEILING PANELS  | NTS            |
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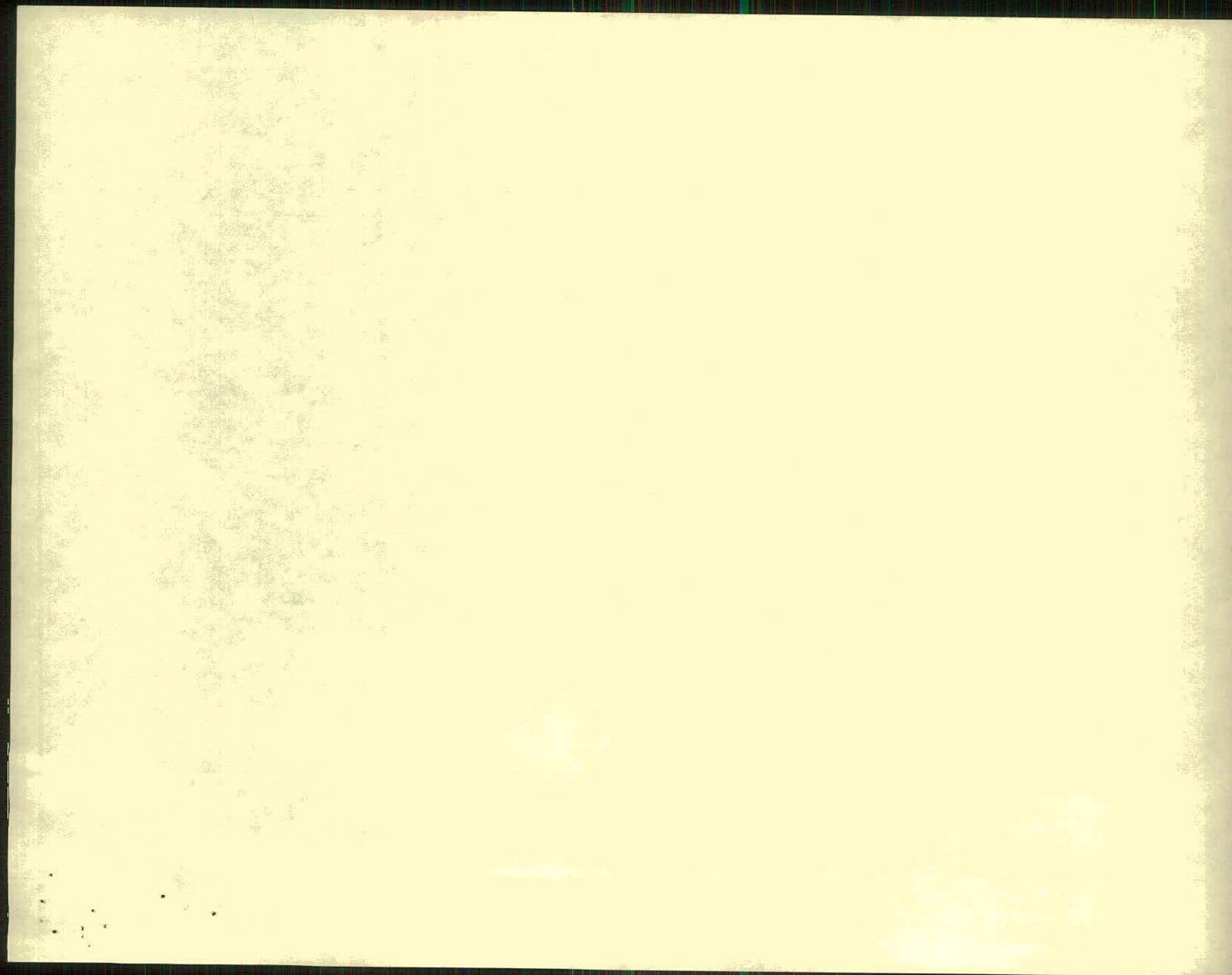
92946



- NOTES:
- 1) MATERIAL: KYDEX 6185 SHEET, 0.080 THICK.  
P3-VELOUR MATTE, STEEL GRAY #52068  
PER DART SPEC MKYD6185S.080-P3-52068
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 7.21 lbs
  - 8) TEXTURE ON THIS SIDE
  - 9) 0.14 RADIUS NOT SHOWN FOR CLARITY
  - 10) DRILL & TRIM D4634-5 PER TOOL DT9838
  - 11) THERMOFORM PER QSI 022 USING DT9846 TOOL  
MIN. THICKNESS AFTER FORMING:  
EDGES = 0.060  
ELSEWHERE = 0.070

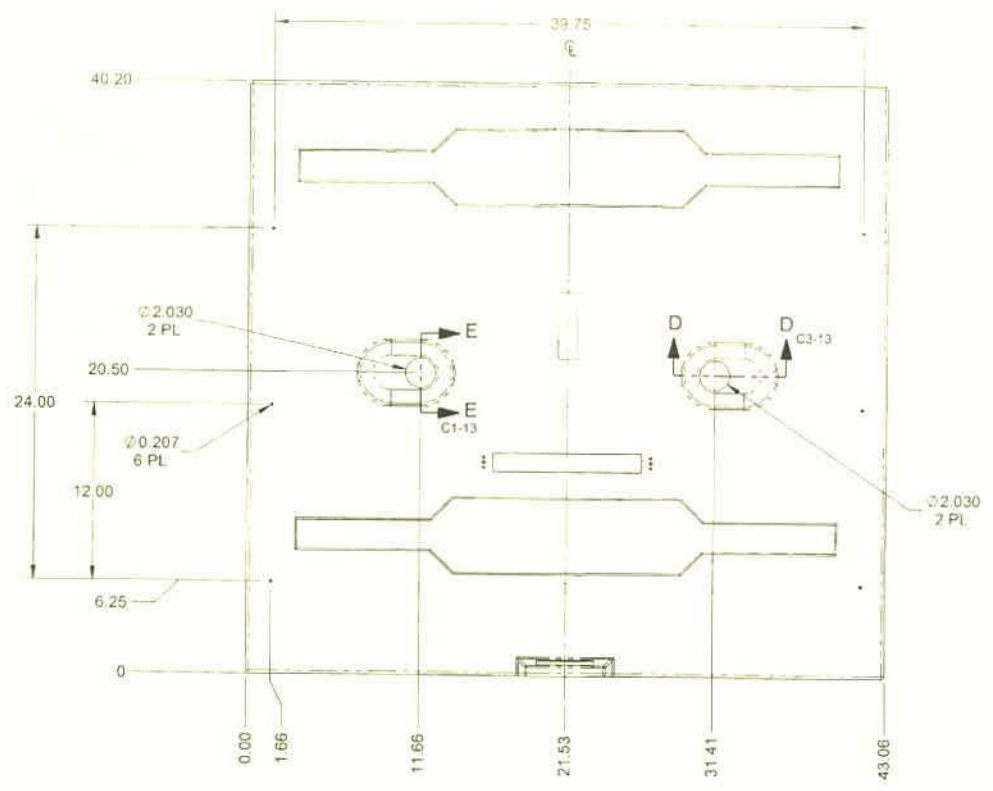
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| DRAWN      | RF                 |   |                |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.   | REV. A         |
| MFG. APPR. | <i>[Signature]</i> | <b>D4634</b>  | SHEET 11 OF 14 |
| APPROVED   | <i>[Signature]</i> | TITLE   | SCALE          |
| DE APPR.   | <i>[Signature]</i> | <b>CENTER CEILING PANELS</b>  | NTS            |
| DATE       | 12.07.25           | COPYRIGHT © 2012 BY DART AEROSPACE LTD<br><small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |                |





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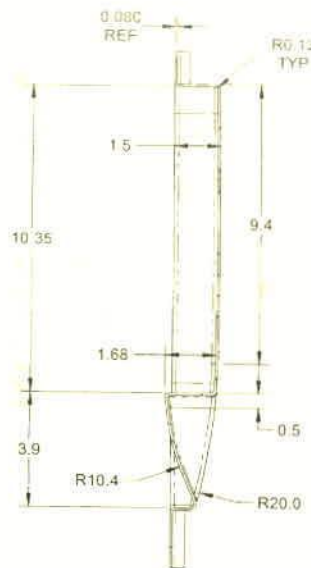
**D4634-5 AFT, CENTER CEILING PANEL**  
AUXILIARY VIEW

REVISIONS  
2012-07-05  
WHP

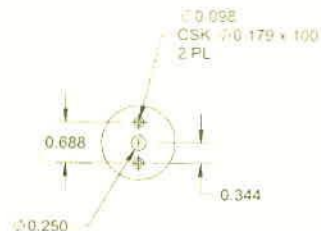
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| DRAWN      | RF       |  |                |
| CHECKED    | RF       | DRAWING NO.  | REV. A         |
| MFG. APPR. | RF       | D4634  | SHEET 12 OF 14 |
| APPROVED   | WHP      | TITLE  | SCALE          |
| DE APPR.   | WHP      | CENTER CEILING PANELS  | NTS            |
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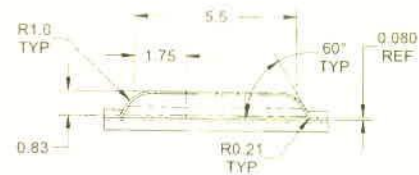
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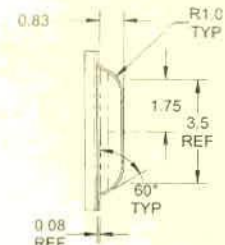
**SECTION G-G**  
SCALE 4X CS-8



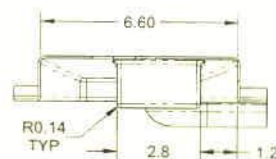
**DETAIL C**  
SCALE 4X B7-7  
B4-9  
B4-11



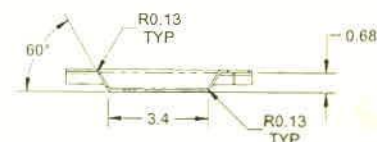
**SECTION D-D**  
SCALE 2X B6-8  
C4-10  
C4-12



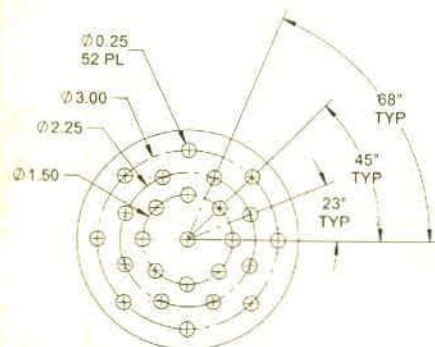
**SECTION E-E**  
SCALE 4X B5-8  
C4-10  
C5-12



**SECTION H-H**  
SCALE 2X CS-8



**SECTION J-J**  
SCALE 2X B6-13



**DETAIL B**  
SCALE 4X B7-7  
2 PL

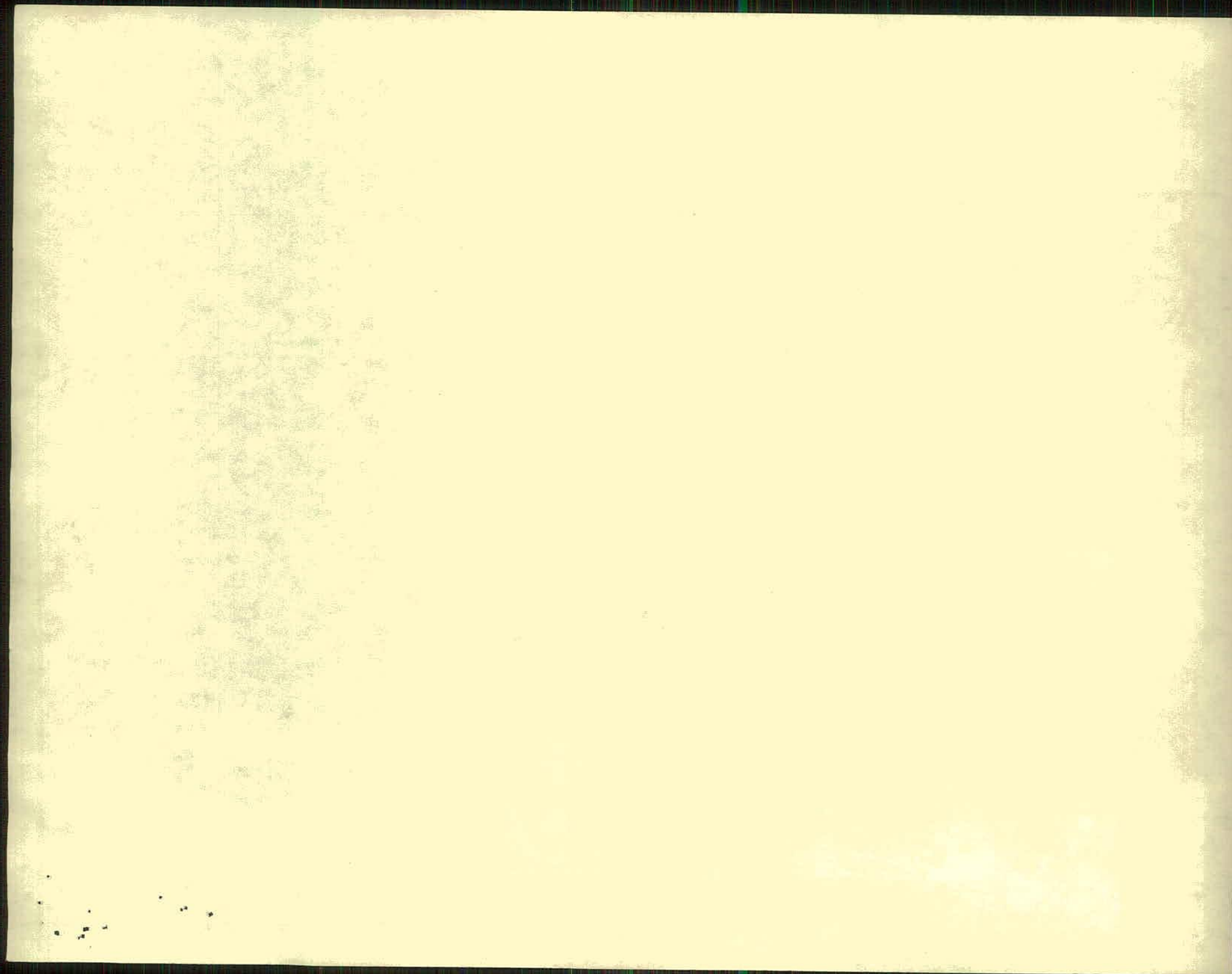


**DETAIL I**  
SCALE 4X TYP B2-10  
C2-10  
B2-11  
C2-11

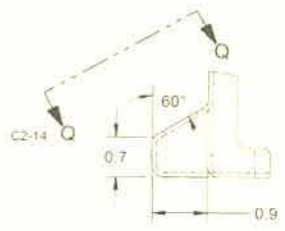
2012-11-05  
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| DRAWN      | RF       |  |                |
| CHECKED    | RF       | DRAWING NO.  | REV. A         |
| MFG. APPR. | RF       | D4634  | SHEET 13 OF 14 |
| APPROVED   | RF       | TITLE  | SCALE          |
| DE APPR.   | RF       | CENTER CEILING PANELS  | NTS            |
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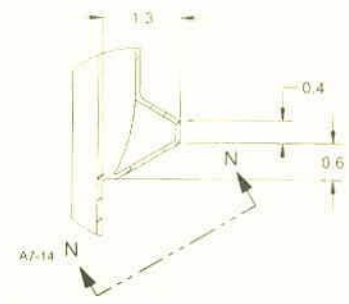




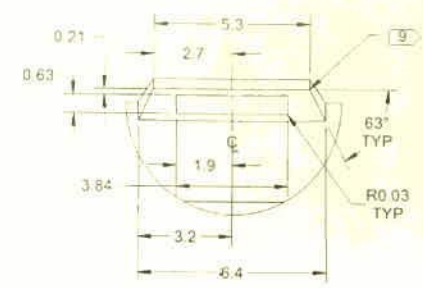
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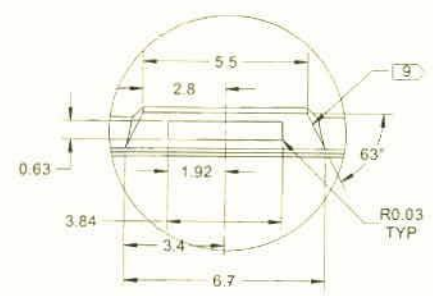
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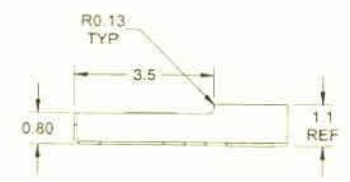
**DETAIL M**  
SCALE 2X C3-7



**DETAIL Q**  
SCALE 0.5X D8-14



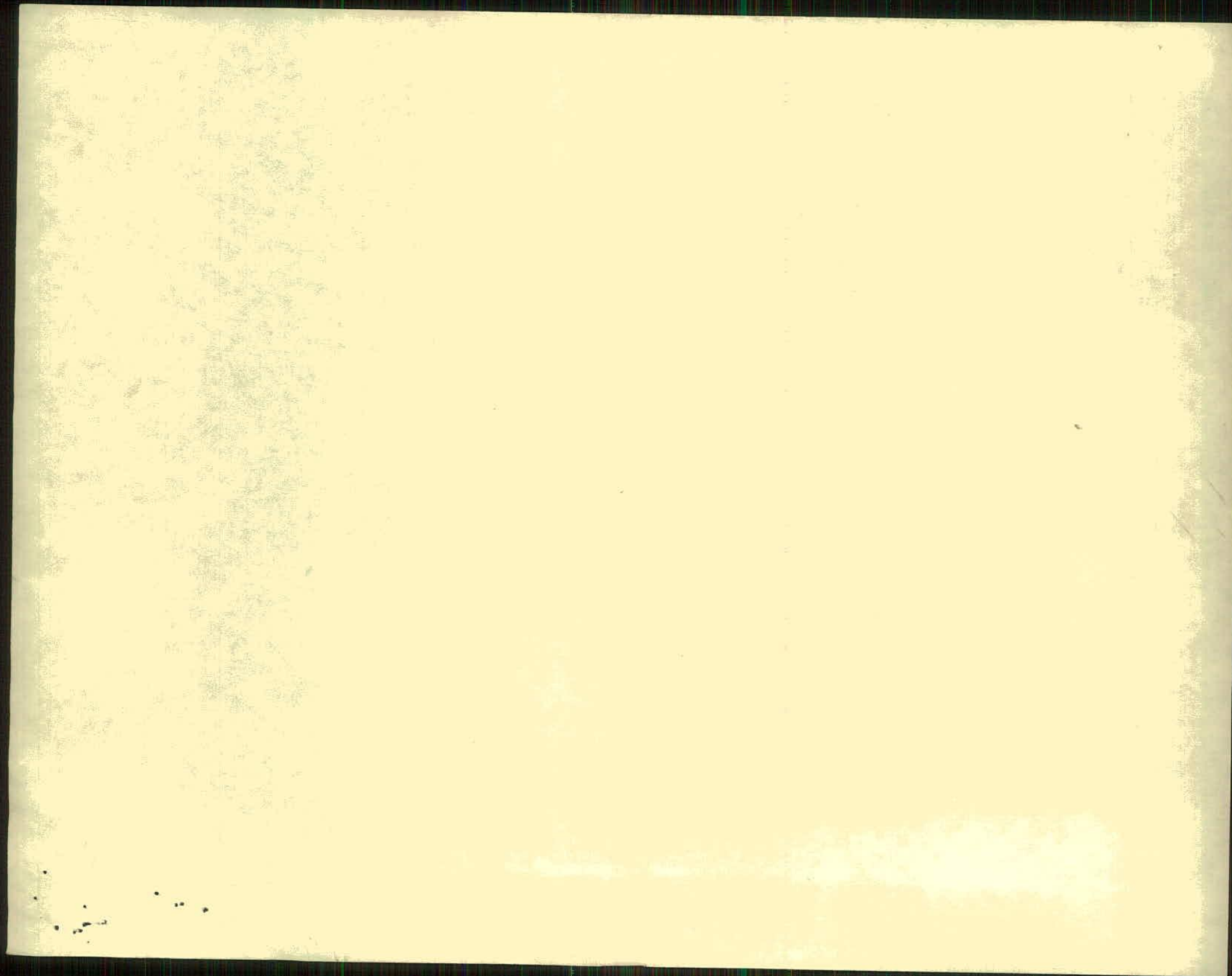
**DETAIL N**  
SCALE 0.5X C5-14



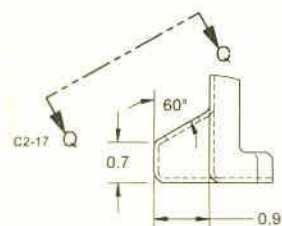
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SCALE 1.3X B6-11

2012-11-05  
MR

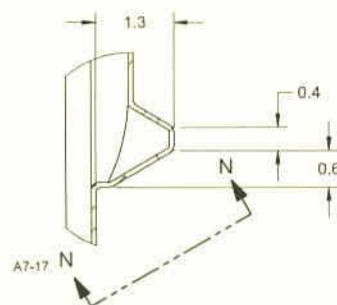
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| DRAWN     | RF                 |  |                |
| CHECKED   | <i>[Signature]</i> | DRAWING NO.  | REV. A         |
| MFG APPR. | <i>[Signature]</i> | D4634  | SHEET 14 OF 14 |
| APPROVED  | <i>[Signature]</i> | TITLE  | SCALE          |
| DE APPR.  | <i>[Signature]</i> | CENTER CEILING PANELS  | NTS            |
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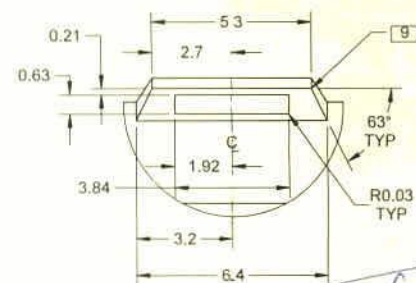




**DETAIL P** B3-14  
SCALE 2X

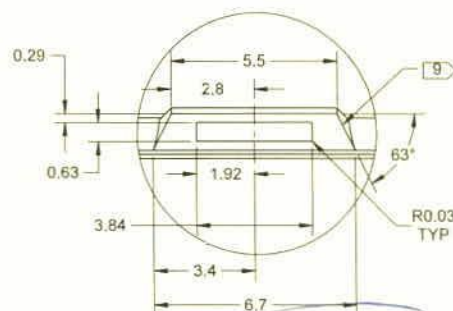


**DETAIL M** C3-10  
SCALE 2X



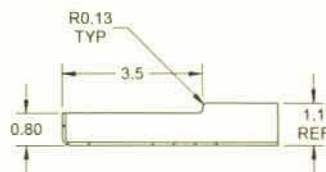
**DETAIL Q** B4-15  
SCALE 0.5X D8-17

*AFT CENTER*

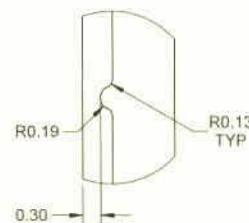


**DETAIL N** C5-17  
SCALE 0.5X B4-15

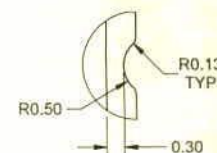
*FORWARD CENTER ?*



**SECTION O-O** B6-14  
SCALE 1.3X



**DETAIL R** B3-10  
SCALE 4X C3-10  
B2-12



**DETAIL S** B3-10  
SCALE 4X C2-12

**PRELIMINARY ISSUE**

12.11.30

|  |   |  |                |
|--|---|--|----------------|
| DESIGN   | RF  | <b>DART AEROSPACE LTD</b>              |                |
| DRAWN  | RF  | HAWKESBURY, ONTARIO, CANADA            |                |
| CHECKED  |  | DRAWING NO.                            | REV. PB3       |
| MFG. APPR.   |   | D4634                                  | SHEET 17 OF 17 |
| APPROVED   |   | TITLE                                  | SCALE          |
| DE APPR.   |   | CENTER CEILING PANELS                  | NTS            |
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3